April 21, 2006

DRAFT Charge Computational Toxicology Subcommittee June 19-20, 2006 Meeting

Background

The National Center for Computational Toxicology (NCCT) became operational on February 20, 2005. On April 25-26, 2005, the BOSC Computational Toxicology Subcommittee held its first public meeting at the Office of Research and Development's (ORD) Research Triangle Park (RTP), North Carolina facility, where the majority of NCCT staff is located. This meeting was intended as the first of several consultative reviews of the Center's progress, and was prospective in nature, due to the newness of the Center. The Subcommittee developed a letter report from the April meeting which addressed six charge questions that concentrated on the NCCT's strategic goals; its collaborations, and connectedness to the rest of the Agency and to outside scientists; its staffing plan; and its thematic choices. The letter report was finalized by the BOSC Executive Committee and transmitted to ORD in July 2005. A formal response of the NCCT to the review was provided to the BOSC at their September 2005 Executive Committee meeting.

The purpose of the June 2006 review is to continue to provide the NCCT with advice on the progress the Center has made, in the past year, in fulfilling its mission and strategic goals. In particular, the subcommittee will address the following questions:

- 1. What progress has been made in the last year in developing/maximizing connections and collaborations within ORD and the Agency, through communities of practice and other interactions? Are there notable examples of collaborations that have been established that increase the reach and effectiveness of the NCCT? Are there additional collaboration opportunities the NCCT should explore?
- 2. How does the work of the new extramural bioinformatics centers complement the intramural program, and how should the outputs best be integrated into NCCT strategic direction?
- 3. Although the intent is not to review individual research programs, do the research programs highlighted during this review offer the promise of increasing the use and effectiveness of computational methods in Agency research? Do the efforts fulfill the goal of leveraging the resources of the NCCT to increase effectiveness?
- 4. Since a large part of the mission of the NCCT is to accelerate the use of computational tools in the mission of the Agency, please comment on:
 - a. Do the proposed computational models have the potential to identify and reduce uncertainties associated with the risk assessment process?
 - b. Will these models be able to help identify susceptible populations and compare potential risks to those populations with risks to the general and less susceptible population?

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- c. Is the coordination between model development and associated data collection sufficient to avoid problems with the models being either over- or under-determined?
- 5. Please comment on the comp tox implementation plan, focusing on the NCCT and STAR center components. Does it set an achievable road map for accomplishing the NCCT's major goals over the next 3 years, as described in *A Framework for a Computational Toxicology Research Program?* Does it set realistic and relevant milestones, and clearly articulate projected program outputs that will result in environmental outcomes?
- 6. Please comment on the progress made in the 5 major research track thematic areas of the comp tox research program, and whether the current/planned research will address the major goals in the Framework. The Center has made staffing additions and initiated new research over the past year. Based on these changes, what is your view of the depth and breadth of the areas selected for emphasis?
- 7. What is the evidence that the NCCT is responsive to program office and regional research needs?
- 8. Please comment on how effectively the NCCT is communicating its research program to EPA Program Offices, Regional Offices, and other stakeholders to inform their environmental decision making.
- 9. Is the current research program designed to achieve environmental outcomes? Please provide recommendations on how the NCCT can best measure these outcomes.